

PCT09

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,831

DATE: 09/20/2001  
 TIME: 12:46:02

Input Set : A:\Sequence list.txt  
 Output Set: N:\CRF3\09202001\I914831.raw

ENTERED

3 <110> APPLICANT: Merck Patent GmbH  
 5 <120> TITLE OF INVENTION: Histidine Protein Phosphatase  
 7 <130> FILE REFERENCE: Histidine Phosphatase Protein  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/914,831  
 C--> 10 <141> CURRENT FILING DATE: 2001-09-04  
 12 <160> NUMBER OF SEQ ID NOS: 11  
 14 <170> SOFTWARE: PatentIn Ver. 2.1  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 375  
 18 <212> TYPE: DNA  
 19 <213> ORGANISM: Homo sapiens  
 21 <220> FEATURE:  
 22 <221> NAME/KEY: CDS  
 23 <222> LOCATION: (1)-(375)  
 24 <223> OTHER INFORMATION: Human histidine protein phosphatase  
 26 <400> SEQUENCE: 1  
 27 atg gcg gtg gcg gac ctc gct ctc att cct gat gtg gac atc gac tcc 48  
 28 Met Ala Val Ala Asp Leu Ala Leu Ile Pro Asp Val Asp Ile Asp Ser  
 29 1 5 10 15  
 31 gac ggc gtc ttc aag tat gtg ctg atc cga gtc cac tcg gct ccc cgc 96  
 32 Asp Gly Val Phe Lys Tyr Val Leu Ile Arg Val His Ser Ala Pro Arg  
 33 20 25 30  
 35 tcc ggg gct ccg gct gca gag agc aag gag atc gtg cgc ggc tac aag 144  
 36 Ser Gly Ala Pro Ala Ala Glu Ser Lys Glu Ile Val Arg Gly Tyr Lys  
 37 35 40 45  
 39 tgg gct gag tac cat gcg gac atc tac gac aaa gtg tcg ggc gac atg 192  
 40 Trp Ala Glu Tyr His Ala Asp Ile Tyr Asp Lys Val Ser Gly Asp Met  
 41 50 55 60  
 43 cag aag caa ggc tgc gac tgt gag tgt ctg ggc ggc ggc cgc atc tcc 240  
 44 Gln Lys Gln Gly Cys Asp Cys Glu Cys Leu Gly Gly Gly Arg Ile Ser  
 45 65 70 75 80  
 47 cac cag agt cag gac aag aag att cac gtg tac ggc tat tcc atg gcc 288  
 48 His Gln Ser Gln Asp Lys Lys Ile His Val Tyr Gly Tyr Ser Met Ala  
 49 85 90 95  
 51 tat ggt cct gcc cag cac gcc att tca act gag aaa atc aaa gcc aag 336  
 52 Tyr Gly Pro Ala Gln His Ala Ile Ser Thr Glu Lys Ile Lys Ala Lys  
 53 100 105 110  
 55 tac ccc gac tac gag gtc acc tgg gct aac gac ggc tac 375  
 56 Tyr Pro Asp Tyr Glu Val Thr Trp Ala Asn Asp Gly Tyr  
 57 115 120 125  
 60 <210> SEQ ID NO: 2  
 61 <211> LENGTH: 125  
 62 <212> TYPE: PRT  
 63 <213> ORGANISM: Homo sapiens  
 65 <400> SEQUENCE: 2  
 66 Met Ala Val Ala Asp Leu Ala Leu Ile Pro Asp Val Asp Ile Asp Ser  
 67 1 5 10 15

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/914,831

DATE: 09/20/2001  
TIME: 12:46:02

Input Set : A:\Sequence list.txt  
Output Set: N:\CRF3\09202001\I914831.raw

```

69 Asp Gly Val Phe Lys Tyr Val Leu Ile Arg Val His Ser Ala Pro Arg
70          20          25          30
72 Ser Gly Ala Pro Ala Ala Glu Ser Lys Glu Ile Val Arg Gly Tyr Lys
73          35          40          45
75 Trp Ala Glu Tyr His Ala Asp Ile Tyr Asp Lys Val Ser Gly Asp Met
76          50          55          60
78 Gln Lys Gln Gly Cys Asp Cys Glu Cys Leu Gly Gly Gly Arg Ile Ser
79 65          70          75          80
81 His Gln Ser Gln Asp Lys Lys Ile His Val Tyr Gly Tyr Ser Met Ala
82          85          90          95
84 Tyr Gly Pro Ala Gln His Ala Ile Ser Thr Glu Lys Ile Lys Ala Lys
85          100          105          110
87 Tyr Pro Asp Tyr Glu Val Thr Trp Ala Asn Asp Gly Tyr
88          115          120          125

```

91 <210> SEQ ID NO: 3

92 <211> LENGTH: 16

93 <212> TYPE: PRT

94 <213> ORGANISM: mammalian

96 <220> FEATURE:

97 <221> NAME/KEY: PEPTIDE

98 <222> LOCATION: (1)..(16)

99 <223> OTHER INFORMATION: conserved mammalian sequence

101 <400> SEQUENCE: 3

```

102 Asp Cys Glu Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp
103 1          5          10          15

```

106 <210> SEQ ID NO: 4

107 <211> LENGTH: 33

108 <212> TYPE: PRT

109 <213> ORGANISM: mammalian

111 <220> FEATURE:

112 <221> NAME/KEY: PEPTIDE

113 <222> LOCATION: (1)..(33)

114 <223> OTHER INFORMATION: conserved mammalian sequence 2

116 <220> FEATURE:

117 <221> NAME/KEY: SITE

118 <222> LOCATION: (17)

119 <223> OTHER INFORMATION: X = K or R

121 <220> FEATURE:

122 <221> NAME/KEY: SITE

123 <222> LOCATION: (27)

124 <223> OTHER INFORMATION: X = A or G

126 <220> FEATURE:

127 <221> NAME/KEY: SITE

128 <222> LOCATION: (30)

129 <223> OTHER INFORMATION: X = P or R

131 <400> SEQUENCE: 4

```

132 Asp Cys Glu Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp
133 1          5          10          15

```

W--> 135 Xaa Lys Ile His Val Tyr Gly Tyr Ser Met Xaa Tyr Gly Xaa Ala Gln

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,831

DATE: 09/20/2001  
 TIME: 12:46:02

Input Set : A:\Sequence list.txt  
 Output Set: N:\CRF3\09202001\I914831.raw

136	20	25	30
-----	----	----	----

138 His

142 <210> SEQ ID NO: 5

143 <211> LENGTH: 44

144 <212> TYPE: PRT

145 <213> ORGANISM: mammalian

147 <220> FEATURE:

148 <221> NAME/KEY: PEPTIDE

149 <222> LOCATION: (1)..(44)

150 <223> OTHER INFORMATION: conserved mammalian sequence 3

152 <400> SEQUENCE: 5

153 Tyr His Ala Asp Ile Tyr Asp Lys Val Ser Gly Asp Met Gln Lys Gln

154 1 5 10 15

156 Gly Cys Asp Cys Glu Cys Leu Gly Gly Arg Ile Ser His Gln Ser

157 20 25 30

159 Gln Asp Lys Lys Ile His Val Tyr Gly Tyr Ser Met

160 35 40

---

163 <210> SEQ ID NO: 6

164 <211> LENGTH: 124

165 <212> TYPE: PRT

166 <213> ORGANISM: rabbit

168 <220> FEATURE:

169 <221> NAME/KEY: PEPTIDE

170 <222> LOCATION: (1)..(124)

171 <223> OTHER INFORMATION: rabbit histidine protein phosphatase

173 <400> SEQUENCE: 6

174 Ala Ala Ala Gly Leu Ala Gln Ile Pro Asp Val Asp Ile Asp Ser Asp

175 1 5 10 15

177 Gly Val Phe Lys Tyr Val Leu Ile Arg Val His Ala Ala Pro Pro Ser

178 20 25 30

180 Glu Ala Pro Gly Gly Glu Ser Lys Asp Ile Val Arg Gly Tyr Lys Trp

181 35 40 45

183 Ala Glu Tyr His Ala Asp Ile Tyr Asp Lys Val Ser Gly Glu Leu Gln

184 50 55 60

186 Lys Lys Gly His Asp Cys Glu Cys Leu Gly Gly Arg Ile Ser His

187 65 70 75 80

189 Gln Ser Gln Asp Arg Lys Ile His Val Tyr Gly Tyr Ser Met Gly Tyr

190 85 90 95

192 Gly Arg Ala Gln His Ser Val Ser Thr Glu Lys Ile Arg Ala Lys Tyr

193 100 105 110

195 Pro Asp Tyr Glu Val Thr Trp Ala Asp Asp Gly Tyr

196 115 120

199 <210> SEQ ID NO: 7

200 <211> LENGTH: 123

201 <212> TYPE: PRT

202 <213> ORGANISM: rat

204 <220> FEATURE:

205 <221> NAME/KEY: PEPTIDE

206 <222> LOCATION: (1)..(123)

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/914,831

DATE: 09/20/2001  
TIME: 12:46:02

Input Set : A:\Sequence list.txt  
Output Set: N:\CRF3\09202001\I914831.raw

207 <223> OTHER INFORMATION: rat histidine protein phosphatase

209 <400> SEQUENCE: 7

```

210 Asn Gly Leu Asn Thr Thr Arg Gly Lys Gly Ser Ser Pro Leu Gly Lys
211 1 5 10 15
213 Asp His Gln Glu Leu Glu Leu Thr Pro Tyr Pro Ala Val Lys Phe
214 20 25 30
216 Ser Val Gly Pro Thr Arg Ala Thr Arg Ala Tyr Pro Glu Ala Thr Leu
217 35 40 45
219 Pro Thr Ser Ala Asp Ile Tyr Asp Lys Val Ser Gly Glu Leu Gln Lys
220 50 55 60
222 Asn Gly Tyr Asp Cys Glu Cys Leu Gly Gly Gly Arg Ile Ser His Gln
223 65 70 75 80
225 Ser Gln Asp Arg Lys Ile His Val Tyr Gly Tyr Ser Met Gly Tyr Gly
226 85 90 95
228 Arg Ala Gln His Ser Val Ser Thr Glu Lys Ile Lys Ala Lys Tyr Pro
229 100 105 110
231 Asp Tyr Glu Val Thr Trp Ala Asp Asp Gly Tyr
232 115 120

```

235 <210> SEQ ID NO: 8

236 <211> LENGTH: 124

237 <212> TYPE: PRT

238 <213> ORGANISM: mouse

240 <220> FEATURE:

241 <221> NAME/KEY: PEPTIDE

242 <222> LOCATION: (1)..(124)

243 <223> OTHER INFORMATION: mouse histidine protein phosphatase

245 <400> SEQUENCE: 8

```

246 Met Ala Ala Asp Leu Gly Gln Ile Pro Asp Val Asp Ile Asp Ser Asp
247 1 5 10 15
249 Gly Val Phe Lys Tyr Val Leu Ile Arg Val His Leu Ala Glu Pro Ser
250 20 25 30
252 Gly Asp Pro Ala Lys Glu Cys Lys Glu Ile Val Arg Gly Tyr Lys Trp
253 35 40 45
255 Ala Glu Tyr His Ala Asp Ile Tyr Asp Lys Val Ser Gly Glu Leu Gln
256 50 55 60
258 Arg Asn Gly Tyr Asp Cys Glu Cys Leu Gly Gly Gly Arg Ile Ser His
259 65 70 75 80
261 Gln Ser Gln Asp Arg Lys Ile His Val Tyr Gly Tyr Ser Met Gly Tyr
262 85 90 95
264 Gly Arg Ala Gln His Ser Val Ser Thr Glu Lys Ile Lys Ala Lys Tyr
265 100 105 110
267 Pro Asp Tyr Glu Val Thr Trp Ala Asp Asp Gly Tyr
268 115 120

```

271 <210> SEQ ID NO: 9

272 <211> LENGTH: 16

273 <212> TYPE: PRT

274 <213> ORGANISM: Artificial Sequence

276 <220> FEATURE:

277 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide for

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,831

DATE: 09/20/2001

TIME: 12:46:02

Input Set : A:\Sequence list.txt

Output Set: N:\CRF3\09202001\I914831.raw

278       generating an antibody directed against histidine  
279       protein phosphatase  
281 <400> SEQUENCE: 9  
282 Gln Ile Pro Asp Val Asp Ile Asp Ser Asp Gly Val Phe Lys Tyr Val  
283    1                   5                   10                   15  
286 <210> SEQ ID NO: 10  
287 <211> LENGTH: 14  
288 <212> TYPE: PRT  
289 <213> ORGANISM: Artificial Sequence  
291 <220> FEATURE:  
292 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide for  
293       generating an antibody directed against histidine  
294       protein phosphatase  
296 <400> SEQUENCE: 10  
297 Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp Lys  
298    1                   5                   10  
301 <210> SEQ ID NO: 11  
302 <211> LENGTH: 14  
303 <212> TYPE: PRT  
304 <213> ORGANISM: Artificial Sequence  
306 <220> FEATURE:  
307 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide for  
308       generating an antibody directed against histidine  
309       protein phosphatase  
311 <400> SEQUENCE: 11  
312 Cys Thr Glu Lys Ile Lys Ala Lys Tyr Pro Asp Tyr Glu Val  
313    1                   5                   10

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/914,831

DATE: 09/20/2001

TIME: 12:46:04

Input Set : A:\Sequence list.txt

Output Set: N:\CRF3\09202001\I914831.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4